

No 33

Hydro-Cyanic-acid^{7.}

+ Symptom

An Inaugural Dissertation,
On the

Efficacy of the Hydro-Cyanic
acid, in the treatment of Phthisis
Pulmonalis, Submitted to the

Faculty of Physic
in the

University of Pennsylvania,
By
John Lingley

Passed March 15th 1823

The University of Pennsylvania
Philadelphia

Office of the Vice-Chancellor
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On the efficacy of the Hydro-Cyanic Acid in the cure of Phthisis Pulmonalis.

The subject which I have selected for my essay on this occasion, is one, which has of late engaged a large share of the attention of Practitioners.

I have encountered the subject, not from an expectation of doing it the justice which it demands, but rather from the peculiarity of my circumstances.

In the early part of my medical studies, this article engaged a very general attention, so much so indeed, that I was induced to regard it more particularly, and especially as I had favourable opportunities of testing its efficacy in the common disorders of this country.

As the enquiry is entirely experimental, this paper will merely comprise the histories of some cases in which the medicine was tried by my friends, and wherein some cases where I made trial of it myself.

I will now succinctly state the amount of my knowledge of the remedy in the cure of Disease.

In all the trials with it in consumption, the medicine may be safely said to have acted the best of a Sella

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-ation: But this is all the length I can go in making a statement of its powers, in the cure of those forms of disease.

That it should act beneficently so far only, would appear very reasonable from analogy. But experience, I fear, will lend a hand, in blasting our pleasing anticipations of its curative powers, and in fixing this disease even more strongly, among the reproaches of our art. What my object being rather to give the practitioners of the cases, than to offer general remarks, I cannot therefore indulge in any further preliminary, but must proceed to give the cases in detail.

Case 1st

I - N - Aged 39 years of a delicate make, and from his appearance, I would suppose him to have had a hereditary predisposition to pulmonary disease. He informed me that several of his ancestors had been carried off by it, which confirmed me in my belief of its hereditary origin. I learned from some persons who knew him, that he has been addicted to habits of intemperance for several years, and notwithstanding has generally been healthy.

About 16 Months since he was seized with violent

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comp. difficulty of breathing, with shifting pains in different parts of his chest, being sometimes felt in the shoulder, at other in the back, & at another season the sternum &c. These symptoms have continued with more or less violence from that time until near May 11th 1821. At this date I find added to the former list of symptoms, a very feeble, quick, and irritable pulse. Chills, & sweats have begun to add to his sufferings, and to deprive him of rest for the greater part of the night. His stomach is likewise very irritable, being so much enervated, as to reject all food of an unbroken, or indigestible kind. From the whole tenor of his case, I would pronounce him in the commencement of the Scotic stage of Phthisis - sic Pulmonalis.

To meet these circumstances, a recourse to any of the common remedies, if not absolutely useless, would at best be trifling with the life of the patient, he was accordingly ordered the Hydro-Cyanic acid in the proportion of two ~~grains~~ ^{grains} of Schell's formula to zviij of water, was a table-spoon full every two hours. He was ordered to discontinue the medicine for a time, if it produced much nausea, or pain in the head.

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May 13th The patient much as at last visit. Increase the strength of the pulsatilla to 3 drops to give water ~~the~~ the same as before. 14th Somewhat better this morning, cough not so troublesome, and he rested well last night.

15th & 16th At on the 15th as yet there has been produced no new - sear or hair in the head. 17th He has not so well / to-day. He feels a sense of weight, and oppression about the chest, which I attribute to a want of density in the atmosphere, which, if we may judge from the case there has changed greatly since yesterday. 18th This evening the medicine has produced a slight hair in the head, though there is no alteration in the pulse.

21st At this date I find the following passage in my note book in indication of his amendment "with regard to ease first I can not as yet speak certainly, but from the favorable appearances which now exist I anticipate a speedy convalescence. Since the 18th the medicine has checked the cough, and all the other distressing symptoms. I need here hardly state that these high wrought expectations have never been realized.

From the 24th to the 12 June I visited the patient every few days nothing however of occurrence worthy an

inspiration here, except a slight attenuation in his pulse for the latter being neither so rapid, nor irregular, but slower, fuller, and more regular. The patient now regulates the dose according to the state of his own feelings; if he feels much sickness at stomach, or pain in the breast, he diminishes, or altogether suspends the use of the medicine. June 21st Since last visit, he informs me, that his appetite and strength have been rapidly recruiting.

Since he commenced the use of the medicine, he has taken nearly the same preparation, viz. ten drops of the Acid to ʒviij of water. This day I ordered him to increase its strength to 15 drops to ʒviij of water, of this the same dose to be used as before. He has still some pain about the shoulders. 23rd He is this day much better, than at any time since my attendance. His appetite and strength are rapidly returning, coughs none of any consequence, rests well at night, and feels in every respect more comfortable, than for many months past. 25th To day has so far recovered as to be able to walk to town to get his medicine renewed. I may here mention that the distance which he travelled this day was

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about four miles, and as he afterwards informed me, entirely without fatigue. 25th This day I heard from my patient his situation is much as when I last saw him. July 9th I frequently heard from the patient since last date and this day saw him myself. Nothing has transpired worthy of notice, and he now appears as before. From this time until October 18th I frequently visited him. During this time he appeared to remain stationary, or if he advanced towards a recovery, it was with a very sluggish pace. At the latter date I find a pretty considerable swelling at the sternal end of each clavicle. One of them appears as though it were about to suppurate, the other, he informs me, is rather diminishing in size. 22^d At last visit. 24th The abscess which was about to suppurate at last visit, is now discharging copiously. The only alteration produced by the discharge is a slight improvement of his appetite, and possibly his pulse may be somewhat improved.

27th General health much as at last visit, the swelling on the left clavicle is going on to suppurate, the one on the right, is considerably reduced, though it still discharges freely.

About this time I set out for Philadelphia, but at my

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aparture, I requested my friend and Preceptor H. P. Dean to note any thing worthy of remark during my absence. The patient used the medicine during the winter, it now began to loose its peculiar powers altogether, whether from its frequent repetition or not I will not pretend to say.

The latter difficulty however I endeavoured to obviate in the early part of my attendance, by alternating it with the use of the Latin gums, *Chium* &c.

On my return I learned that a piece of bone had been discharged from one of the abscesses above alluded to.

They appear considerably reduced though the discharge still continues. His general health I find, worse than when I left him last fall. Indeed I now begin to despair of his recovery.

From unavoidable circumstances I could carry the enquiry no further in this case, I was obliged to abandon it but with a full conviction of the mortality of this disease, under this, or any other mode of treatment.

Case 2

J - D - Twenty years of age of a middle stature and in every respect proportionate.

From his appearance I would not suppose his disease to

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have arisen from any hereditary predisposition, of this however I am uncertain having made no particular enquiry into the subject.

At this time May 12th 1821 he labours under the following symptoms. He is harassed with a violent cough & difficulty of breathing, with little or no expectoration, his pulse is quick frequent and very full. He has pain about his chest being frequently seated in the side, but most generally it is located about the sternum. Added to this train of symptoms, he has of late been subject to chills and sweats at night. His nights are very restless from the cough. In short the whole of the symptoms in this case are more strongly marked than in case first.

The patient was directed to use the Prussic acid much in the same manner, as it was used by the subject of the first case. The same injunctions were laid upon him with regard to the effects, if the medicine produced much pain in the head or nausea, he was to discontinue it.

May 14th. All the symptoms as on the 12th 16th was ordered to increase the strength of the preparation to 15 drops to the griv of water. 17th Feels somewhat better this morning, the cough is not quite so troublesome and he

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rested better last night than for some time past.
18th Much as yesterday. 24th Since last visit, the hectic
chills & sweats have been almost entirely suspended.
The cough is also considerably relieved. June 8th This day
I find his stomach very irritable, as he rejects all food
that he may have taken, to relieve this symptom 10 grs of
Sulphas Zinc ~~was~~^{was} ordered, it operated briskly, and re-
lieved him of this troublesome symptom. His pulse is
I think somewhat improved since he began the use of the
medicine. If I could observe little alteration for the better arose
from this time till the month of October, when the asthma
began to act rather as a poison. Indeed at this time he
could not take the smallest dose, without having
produced some of the symptoms of Gastritis. At this
stage of my enquiry I set out for Philadelphia, &
left him labouring under the symptoms of the above
mentioned disease. These symptoms continued with
more or less violence until he died which happened
about a week after my departure.

A case lately occurred, which I will briefly relate, as be-
ing some analogy to the cases noticed in the prelimina-
ry to this essay.

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The Patient had long laboured under Hætic,
from a disease of the hip joint. The Hætic symp-
-toms were if possible more strongly marked than
in any of the preceding cases.

To this Patient the medicine was administered, with-
-out producing even the slightest impression on the
disease. The article was given in quantities sufficient
to produce nausea, and pain in the chest, the signs
by which I judged of its action having commenced
in the system.

For the histories of the three following cases I am
indebted to my friend Dr. M^r Rankin of this County.
Case 1st April 18th 1821. I was requested to pre-
-scribe for Mrs R. aged about 28, who has for several
years been afflicted with a troublesome cough,
night sweats, irregular flushes of heat through the day,
a burning in the palms of the hands, and soles of the
feet, with occasionally a good deal of pain in the
breast. Pulse tense and frequent.

℞ Twelve ounces of blood ^{were} ~~was~~ drawn from the
arm, and a solution of the Hypos-Cyanic Acid in
the proportion of two drs to 7viij of water adminis-
-tered in doses of a table spoon full every two hours.

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May 14th The opisthoris are considerably relieved, but the cough is not entirely removed.

July 2 She informs me, that since she commenced the use of the acid, she rests well at night, and is not much troubled with the cough, unless she exposes herself to cold or wet.

Case 2^d Mr B. Applied to me July 18th, 1825 for relief in a pectoral affection, which commenced about 9 months since. He complains of violent cough, profuse night sweats, a spitting of a tough purulent matter, sometimes streaked with blood. His appetite is much impaired, and his body exhibits the appearance of general Cachexia or wasting.

Mr. M. He will take Hyd.-Cyanic acid 5 Drops to the ozij of water, in doses of a table-spoon full every two hours. ℞. Chin. in doses of 100 drops twice in the day, and at any other intermediate time, if the cough should be very severe. He will likewise take Nitric acid in doses of ten drops three times in the day.

July 28 He has taken the medicines as directed, regularly. He rested well the two last nights, and has coughed very little until this afternoon, when

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it became fully troublesome, but not so severe as on the 18th. The spittle is somewhat streaked with blood, the pain is not so bad, and the night sweats have considerably decreased. Medicines continued as before.

21st He rested well last night and exc^{ed} a good deal of sweating through the night, he appears much as yesterday. All the medicines to be continued, but the quantity of the Prussic Acid to be increased to eight drops to ʒviij of water, the same as before. The Nitro acid to be increased every day by one drop to each dose. & Opⁱ to be increased, no re note.

22nd July Our patient says he felt much better until last night, when his Prussic Acid and ʒ Opⁱ became expended. Upon the whole he is much easier since he commenced the use of the medicine. He says yesterday he had a good deal of head ache, probably owing to the Acid; but it has now left him. Increase the Medicine to ten drops to ʒviij of water. Same as before.

23rd He appears no better than on the 22nd, he was laid badly last night, the cough being incessant. Medicines continued as before.

August 15th. Being of the opinion that nothing was

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so serviceable as the *S. Opia*, he has for some time past taken nothing else, under the use of which he feels comparatively easy and comfortable. 22^d His cough appearing rather hard, I prescribed, a few days, in conjunction with a tea-spoon full of *Laudanum*, two tea-spoons full of the *Elix. Pareg.* He tells me he experiences great relief from this prescription, the cough was loosened, and the pain in his breast was mitigated. Our patient continued daily to take *Laudanum*, and *Paregoric*, until he died, which happened on the 11th December 1821. He was about 45 years of age.

Case 3^d Mrs L- applies to me July 29th 1821. for Medical advice in her case exhibiting the following symptoms viz a very hard dry cough, copious night sweats, want of appetite, with occasional vomiting, and a wasting of the whole body. The pulse is very small, frequent, soft and weak. She complains of no pain in the breast.

M. M. She will take an Emetic of *Ipecac. 20gr* 2. Eight 1/2 hr after the operation of which she will take a tea-spoon full of the following preparation every three hours viz 6 drs Hyd. - Cyanic Acid to 3viij of water.

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August 15th She has continued to use the Prussic acid since it was first prescribed, and appears much relieved of the cough, but is rapidly declining in strength. August 22 For three or four days she has taken none of the Acid (my supply failing) for which was substituted Purg. Elix. but she is evidently much ^{more} distressed enough and difficulty of breathing, since the discontinuance of the medicine. Having now obtained a fresh supply of the Acid, but not knowing precisely its strength, I prescribed two drops to 3ij of water. Dose the same as before.

Aug 25th Last night I was called up by a messenger from my patient, who stated that she appeared to be dying. I visited her, and found her labouring under great oppression about the chest, and difficulty of breathing, her pulse was so frequent as to almost prevent its being numbered and so weak as to be scarcely perceptible.

Whether this great oppression I was brought on by the Acid which she had lately taken, I could not certainly determine. At all events I thought it most prudent to discontinue its use, gave her frequent and large doses of Purg. Elix. which

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appears to relieve her distress considerably.

28th She is still declining rapidly, but appears to be less restrained in her breathing. She takes nothing but *Cliv. Pareg.* She expectorates large quantities of pus mixed with blood.

Although she felt no pain in her breast in the commencement of her disease, yet occasionally during its progress it was pretty severe, for which, she was blistered, and used other remedies. This patient died on the 29th August.

In conclusion I will give the general history of a case, in which the palliative powers displayed by our medicine, were more unequivocal than in any I find recorded.

Mrs G— aged 28 years had long laboured under a predisposition to Pulmonary disease.

In the summer of 1821 the symptoms became more fully formed and shortly after, it displayed its whole frightful train of concomitants.

Prematurely, or about the development of the disease, the ordinary remedies were had recourse to, but with little, if any, relief.

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After this time nothing but palliatives were ad-
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-cid was directed in the usual dose ~~probing~~ ^{probing} ~~solidity~~.

I kept no particular account of the case, as
in the fall of the same year, I set out for Philadel-
-phia. The medicine was continued through the
winter. My former friend & Preceptor A. S. Dean
on my return informed me, that the medicine had
so far acted as a palliative, that the patient for a
considerable time regained his flesh and strength,
and that he for a time was flattered into a hope
of his final recovery. But sad disappointment
soon followed the bright anticipation, for he lived
at the same time to relate the melancholy tale
of his relapse; which, finally in the September of
1822 led its interesting victim to an untimely
grave.

